Thinking Outside the Storage Box

April 2014
Why Software-Defined Storage (SDS)?

SDS delivers entire storage functionality in software on standard servers.

- Simplifies IT and Minimizes Cost
- Supports Multiple Platforms
- Improves Agility and Availability
- Enhances Scalability

SDS
What is Hyper-Convergence?

✅ Converges Applications and Storage on Standard Servers

✅ Provides Shared Storage Capabilities

✅ Supports High Levels of Scale-out

✅ Supports Physical and/or Virtualized Environments
What is “Convirtualization?”

Hyper-Convergence Optimized for the Virtual Data Center

- Integrated UI (Single Pane of Glass)
- Converged
  - Compute
  - Storage

- Dramatically Simplified Management
- Enterprise-class VM-level Data Services
- Maximize OPEX Savings

- Ethernet
- Standard Servers
  - Hypervisor
  - Distributed Storage Software
  - Optimize for Flash Performance / Disk Capacity

- Software ONLY - Eliminate Storage Arrays
- Maximize CAPEX Savings
Why Convirtualization? – The Compute/Storage Gap

✓ Enterprise Compute/Server
  – Server Virtualization redefined Computing
    • Abstraction, pooling & on-demand allocation of resources
    • New levels of simplicity, availability, agility and cost

✓ Enterprise Storage
  – Incremental improvements to basic architecture
    • SAN/NAS paradigm virtually unchanged
  – Flash/SSD is the only radical innovation
    • Improves I/O performance and Cost/IOPS (not Cost/GB)
  – No match to compute levels of simplicity, availability, agility, and overall cost
Why Convirtualization Now?

✓ Significant Improvements in Server Technology
  - Number of cores
  - Memory capacity
  - Network bandwidth

✓ Increased Adoption of Virtualization

✓ Flash Optimized Architecture
  - Good performance with fewer spinning disks

✓ Validated by Large Public Cloud Implementations
Capabilities of Convirtualization

- Data Integrity
- Simplified Management
- VM-Centric Data Services
- Independent Linear Scalability of Compute and Storage
- Competitive Performance
Convirtualization Architecture

- **Global Namespace**
  - **Aggregated Storage Pool**
    - **SDS Controller**
      - Hypervisor
      - Disk Drives
      - SSD
    - Server 1
    - Server 2
  - **Virtualization UI**

- **Ethernet**
Use Cases of Convirtualization

Primary Storage

Remote/Branch Office

Virtual Desktop

DR Storage

Test and Development

Cloud Storage
Convirtualization Benefits

✓ No SAN & No NAS
✓ Dramatically Simplifies IT
✓ Delivers all Enterprise-class Storage Capabilities
✓ Maximizes Savings (CAPEX and OPEX)
Thank You

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http://www.maxta.com